

My Neighborhood...



Name

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Public Services and Facilities Element

OUR CITY FUNCTIONS AND SERVICES

Public Services and Facilities Element

Introduction

The Public Services and Facilities Element includes goals, objectives, and policies to address the issues of solid waste, police, fire and emergency services and facilities, wastewater and stormwater systems, water system facilities and local utilities. The locations of these facilities are depicted in Figure 10, Public Facilities Map.

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Solid Waste Management

Introduction

The solid waste portion of this Element includes goals, objectives and policies to ensure that the current and future solid waste needs of Chandler residents are met.

Current Situation

The City of Chandler operates a municipal landfill to receive and dispose of solid waste generated by the residents of the community. The City is currently using the last cell or unit of disposal at the landfill. The City has implemented methods to extend the useful life of the landfill. These methods include:

- The operation of a recycling program to reduce the volume of materials sent to the landfill includes curbside collection of mixed recyclable material and the sale of collected recycled materials to private firms to process the materials. The program has resulted in an estimated 18% reduction of the volume of materials delivered to the landfill.
- Compaction and density of materials placed in the landfill are being pushed to the maximum.

These methods have extended the potential useable period of the landfill to at least 2005.

Future Trends

To continue to provide for the disposal of residential solid waste after the estimated year 2005 closure of the City's landfill, Chandler has entered into a long-term contract with a private firm to receive and dispose of waste at a private landfill. The use of this new landfill will require the hauling of waste. To accommodate this needed haul distance, the City will construct a waste transfer facility. This transfer facility will be used to receive refuse from local collection vehicles and transfer the materials to long haul trucks for transport to the landfill.

Closure of the City's landfill will occur after its capacity has been consumed. Portions of the facility have already been capped and closed.

Planning Issues

The future use of the landfill will be determined based upon such environmental factors and constraints that dictate the best public use of the facility.

Goals, Objectives and Policies

GOAL: MANAGE CHANDLER'S SOLID WASTE IN A SAFE AND EFFICIENT MANNER.

OBJECTIVE: To provide effective customer service to the citizens of Chandler for the safe, efficient collection and disposal of solid waste.

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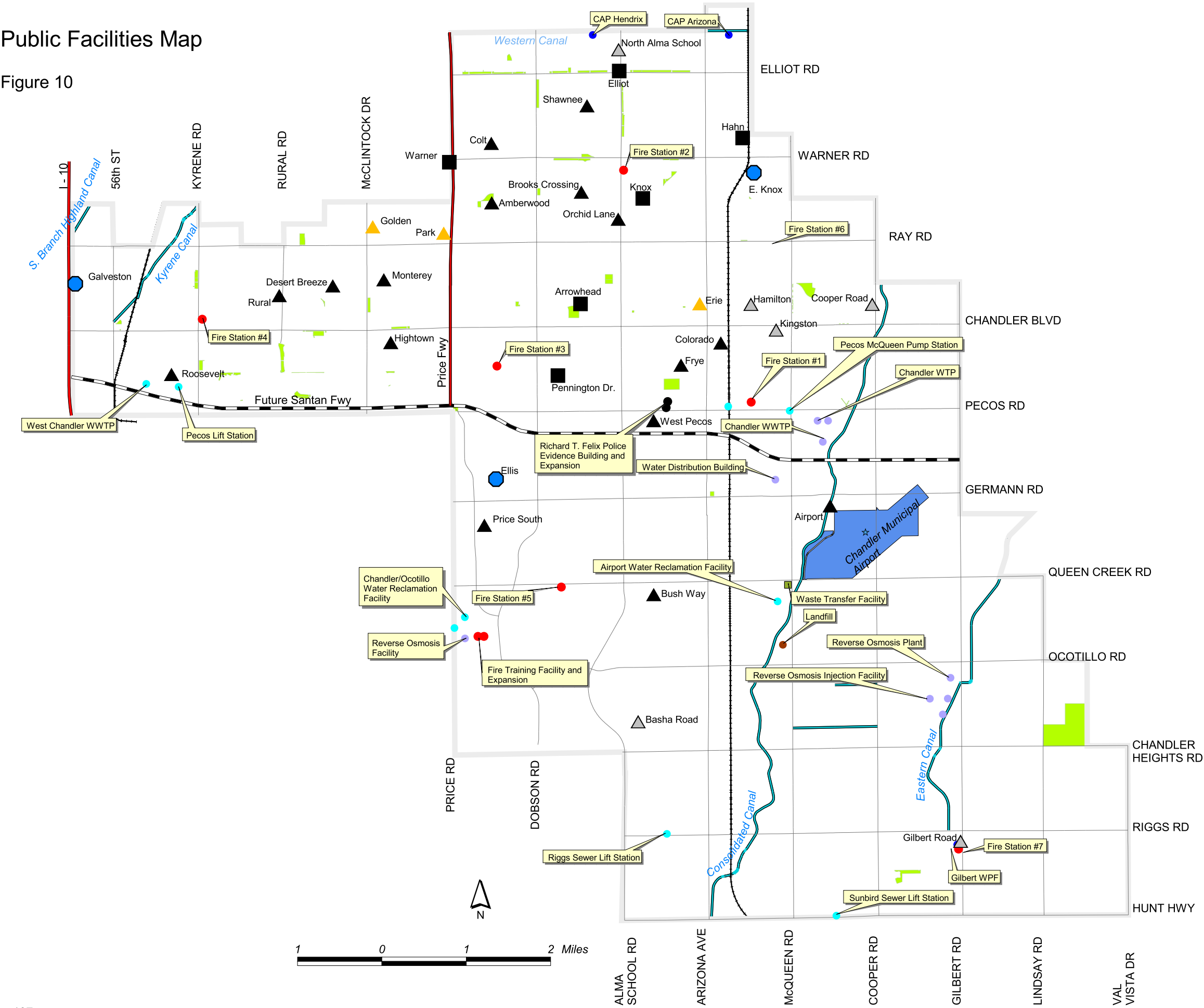
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Policy: Maintain compliance with Chandler policies and all federal, state, and local regulatory requirements.

Policy: Maintain the recycling program to reduce the need to transport and store solid waste.

Public Facilities Map

Figure 10



Public Facilities Map

The Public Facilities Map shows the locations of police, fire and emergency services, sewage, refuse disposal, drainage, local utilities, rights-of-way, easements and facilities for them.

Legend

- Safety**
- Fire Department
 - Police Department
- Wells**
- ▲ Existing City Well
 - Existing SRP/City Well
 - ▲ City Well Under Construction
 - Future City Well
 - ▲ Inactive City Well
- Water Treatment**
- Tank
 - Treatment (water)
 - Treatment (sewer)
- Waste Transfer Facility
- Retention
- Airport
- Canals
- Railroads
- Chandler Municipal Planning Area



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Police Facilities and Services

Introduction

This section addresses the requirements of the Chandler Police Department. The mission of the department is to serve all people within the jurisdiction with respect, fairness, and compassion. Department employees are committed to the prevention of crime and the protection of life and property; preservation of peace, order and safety; the enforcement of laws and ordinances; and the safeguarding of constitutional guarantees.

Current Situation

City of Chandler police facilities were upgraded in 1998 when the department moved to 250 East Chicago Street. This facility is anticipated to meet current and foreseeable needs in this area of the City. As the City continues to grow, however, additional satellite facilities may be necessary to meet the needs of future residents, especially in the developing southern and western areas of the City.

Future Trends

The number of calls per service area is projected to increase commensurate with population.

Planning Issues

To meet the demands of the City's growing population and the demand for police services, several steps are anticipated. Additional satellite facilities will be needed to provide for an anticipated expansion of staff, and new training facilities will need to be added to maintain and enhance the skill levels of the Department.

Goals, Objectives and Policies

GOAL: CONTINUE TO PROTECT CITY OF CHANDLER RESIDENTS AND PROPERTY FROM CRIME AND ENFORCE THE LAWS OF THE CITY OF CHANDLER.

OBJECTIVE: Increase and improve facilities.

Policy: Construct substations to provide service on the south side of the Santan Freeway and the west side of the Price Freeway.

Policy: Evaluate the concept of providing neighborhood service centers, in conjunction with planning for outreach programs and services to outer areas of the City.

Policy: Identify and plan for future training facilities.

Policy: Consider constructing a driving track with training facilities.

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OBJECTIVE: Continue to enhance police presence in the community.

Policy: Continue to keep the Department on the leading edge of crime prevention through the implementation of crime prevention programs and technologies, when appropriate.

Policy: Continue community-oriented policing programs with the Department; continue to provide departmental communications and outreach programs to the community.

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Fire and Emergency Services and Facilities

Introduction

The Fire Department vision is to “earn the respect and trust of the community by being a proactive, innovative, team oriented organization; to create an environment that instills pride, self-esteem, and fosters high morale and to deliver the highest quality of services to meet the needs of the community.”

Current Situation

The Chandler Fire Department currently provides services that include rescue, fire control and extinguishment, and hazardous materials response. A consortium of three agencies provides the City’s emergency medical service (EMS): the Chandler Fire Department, Southwest Ambulance and the Chandler Regional Hospital.

Future Trends

An increasing percentage of the calls for Fire Department Services are Emergency Medical Services (EMS) related. Additionally, Hazardous Materials (HAZMAT) management has become more complex.

Planning Issues

Rapid growth and increasing traffic volumes are anticipated to create new challenges to rapid response of this important community service. Other challenges are anticipated from new growth to the south of the Santan Freeway and west of the Price Freeway.

Goals, Objectives and Policies

GOAL: RESPOND IN A TIMELY MANNER AND PROPERLY CONTROL ANY TYPE OF FIRE, HAZARDOUS MATERIALS, MEDICAL, OR OTHER EMERGENCY SITUATION FOR WHICH CALLED.

OBJECTIVE: Anticipate, prepare for and mitigate the effects of medical, fire and other related emergencies and services through prevention, education and training of personnel and the community.

Policy: Continue to provide emergency response and community programs to Chandler residents.

Policy: Continue to participate in and evaluate programs that benefit the health and safety of Chandler residents.

Policy: Explore alternative emergency medical services concepts.

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OBJECTIVE: Provide highly trained personnel, strategically located fire stations, and well maintained equipment to the City of Chandler.

Policy: Provide new stations, equipment, and personnel to serve the south, west, and existing areas, as determined necessary.

Policy: Address current needs through the provision of an “in-fill” station.

Policy: Re-evaluate facilities needs every five years.

OBJECTIVE: Use modern techniques to provide the necessary equipment and meet the diverse needs of the community.

Policy: Provide additional equipment and training in areas such as high angle, trench and water rescue.

Policy: Train volunteers from the community to provide information on healthcare programs.

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Water System Facilities

Introduction

The current water system provides quality service to the citizens of Chandler. The system includes a comprehensive range of facilities to serve the needs of the community.

Current Situation

The existing water system delivers treated water to residential, commercial, industrial and institutional customers. The existing system consists of distribution piping of various sizes, a surface water treatment plant, water storage tanks and booster pump stations throughout the City, and numerous groundwater production wells.

Water is distributed to customers by distribution piping ranging in size from 4-inch through 48-inch. The current water distribution system operates under one pressure zone due to minimal elevation differences across the planning area. A second pressure zone is planned for the area east of Gilbert Road.

The City of Chandler Surface Water Treatment Plant (SWTP), a conventional treatment plant, is located on the SRP Consolidated Canal near Pecos Road and McQueen Road. The current plant capacity is 90 million gallons per day (MGD). Although the existing SWTP is master planned for a potential ultimate capacity, the City has entered into discussions with Tempe to expand Tempe's Johnny G. Martinez Water Treatment Plant.

Goals, Objectives and Policies

GOAL: IMPLEMENT A WATER SYSTEM TO SUPPORT COMMUNITY GROWTH AND IN-FILL.

OBJECTIVE: Construct the infrastructure and improvement needed to deliver the water supply to Chandler customers.

Policy: Pursue negotiations with adjoining cities to enhance redundant and emergency water supplies.

Policy: Continue programs to develop new wells and renovate existing wells.

OBJECTIVE: Extend reclaimed water distribution system to potential reuse customers, to City recharge facilities, and to agricultural users.

Policy: Continue progressive planning, funding, and construction of reclaimed water facilities that are compatible with other planned multi-use recreational facilities.

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Wastewater

Introduction

This section of the Public Services and Facilities Element includes goals, objectives, and policies to ensure that wastewater systems, and the planning performed to provide needed improvements to the system so as to properly treat and dispose of the wastewater generated within the City of Chandler will be met, and will continue to meet the future needs of citizens over the next decade.

The wastewater system is an essential element supporting the residential, commercial and industrial activities of the City. The wastewater system, comprising collection, treatment and disposal facilities, protects the health and safety of the residents and businesses of the City by safely collecting and treating the wastewater in the City. The continued success of this system is essential to allow for the continued orderly, planned growth of the City.

Current Situation

The City of Chandler wastewater system includes three water reclamation facilities (WRFs), one industrial wastewater treatment plant, collection pipelines, pump stations and various recharge facilities.

The City's gravity collection sewers generally flow from east-northeast to west-southwest. The existing collection system serves the western and northern portions of the City. The system has four major sections as follows:

- The West Chandler area receives flow from the north and east and conveys flow to the Lone Butte Water Reclamation Facility (WRF).
- The North Chandler area receives wastewater from the north and east and conveys flow to the Price Road Interceptor.
- The Central Chandler area receives wastewater from the north and east and conveys flow to the south and west to the Price Road Interceptor.
- The South Chandler area includes the remainder of the land area within the planning area.
- Two major treatment facilities are located in this section of the system South of Pecos Road. Since these facilities are located "midway" between the northern most section (Pecos Road) and southern most section (Hunt Highway) of the South Chandler area, wastewater is collected from the north as well as the south.

The collection system includes several major diversion facilities. These diversions enhance system operational flexibility by allowing wastewater flow diversions, as required, to different parts of the system. A list of these major diversions and a discussion of the function of each of these diversions may be found in the 1998 Wastewater Management Plan.

The collection system also contains several lift stations located throughout the planning area. Major interceptors construction is complete or nearing completion.

The City currently operates three major wastewater treatment facilities: 1) Lone Butte WRF, 2) Ocotillo WRF, and 3) Airport WRF. The industrial wastewater treatment plant (reverse osmosis facility) processes flow received from the Intel Fab 12 facility.

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The City's Tumbleweed Park recharge facility is located at the City's Tumbleweed Park at Ryan Road and McQueen Road. The initial construction in 1996 employed drywell (vadose zone wells) for recharge. Eight direct injection wells were added in 1998 to increase the recharge capacity to 3.0 million gallons per day (MGD). Nine wells were constructed in 1999 to increase the capacity to 5.0 MGD. This facility initially recharged reclaimed water from the Ocotillo WRF. Pipeline modifications have been made so that the Tumbleweed Park receives reclaimed water only from the Airport WRF. An aquifer storage and recovery well (ASR 1) is in operation at the Tumbleweed location and two more wells (ASR-2 and ASR-3) are under construction at the same site. Four ASR wells are planned to be constructed at a location ½ mile south of Queen Creek Road on Old Price Road.

The City operates a recharge facility located adjacent to the Eastern Canal near the intersection of Gilbert Road and Ocotillo Road. This facility was constructed in 1996 and consists of middle alluvial unit injection wells that recharge reclaimed water directly into the aquifer. This facility recharges 1.0 - 1.5 MGD of reclaimed water received from the reverse osmosis industrial wastewater treatment facility serving the Intel Fab 12 and Fab 22 sites. Additionally, a permit and agreement has been obtained to provide 2.8 MGD to Roosevelt Water Conservation District (RWCD) at the Eastern Canal for irrigation purposes.

By agreement, the City delivers up to 1,000 acre-feet per year (0.9 MGD) of reclaimed water for irrigation to the northeast corner of the Bear Creek Golf Course. The golf course is located between Chandler Heights Road and Riggs Road and west of the Consolidated Canal.

The City has an agreement with the Ocotillo Management Group (OMG) to receive the majority of the reclaimed water produced at the Ocotillo WRF and reuse the reclaimed water within the surrounding 9 square mile OMG service area. The agreement, which is under negotiation, between the City and OMG states that 1.0 MGD of effluent (from the Intel Fab 12 domestic sewage entering the Ocotillo WRF) and 20% of the remaining effluent is the City's and the balance belongs to OMG. Therefore, at an operating capacity of 10 MGD for the Ocotillo WRF, the City will receive and use 2.8 MGD and OMG will receive and use 7.2 MGD of the effluent.

OMG uses their portion of reclaimed water to supply various reuse needs within and adjacent to the Ocotillo community. These include the Ocotillo Community Association that uses or delivers effluent to irrigate City rights-of-way, common areas (including park sites), apartment complexes, commercial properties, and approximately 500 homeowners that use it for landscape irrigation. OMG also supplies reclaimed water to the Ocotillo Golf Course, adjacent agricultural land, for landscape irrigation and ornamental lakes and to industrial uses such as the cooling towers at Intel (Fab 12 and Fab 22) and Orbital Sciences.

Additionally, OMG recharges the reclaimed water through 26 drywells located on the Ocotillo Golf Course.

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Future Trends

The City will continue to experience growth in South Chandler. This growth will require the development of additional wastewater facilities. The City has plans to expand its wastewater treatment capacity, add additional collector sewers and pump stations, and build reuse and recharge facilities.

Planning Issues

The City needs to determine the best location for additional wastewater treatment capacity. A need exists to develop more recharge capacity or arrange to dispose of treated effluent not usable for irrigation during the cooler winter months.

Goals, Objectives and Policies

GOAL: ENCOURAGE CONTINUOUS PLANNING FOR THE COMMUNITY.

OBJECTIVE: Actively plan the wastewater systems in response to continued growth in the City and in response to changing regulations.

Policy: Continue the wastewater master planning processes on a 5-year basis.

GOAL: IMPLEMENT WASTEWATER SYSTEM TO SUPPORT COMMUNITY GROWTH.

OBJECTIVE: Meet the existing and future wastewater needs of the community with a well-planned and efficiently operated system.

Policy: Monitor and evaluate City programs for maximum plant capacity of existing wastewater treatment through effective flow diversions.

Policy: Evaluate programs to develop new wastewater treatment capacity where most beneficial.

Policy: Continue orderly development of the collection system.

Policy: Strive to ensure that treatment facilities are adaptable to changing State requirements for reuse and recharge.

Policy: Continue to update the Water, Wastewater, Reclaimed Water, Water Resource, and Stormwater Management Master Plans to reflect changes in infrastructure need due to in-fill and new growth and development every 5 years or, as required.

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Stormwater

Introduction

This section of the Public Services and Facilities Element includes goals, objectives, and policies to ensure that stormwater systems and the planning performed to provide needed improvements to these systems to properly treat and dispose of the stormwater generated within the City of Chandler, and meet the future needs of citizens over the next decade.

Current Situation

The City's first developments were in the downtown area. This area experienced localized ponding problems. These problems have been substantially reduced with the construction of retention basins. The City is planning to connect these downtown basins to the Price Freeway drainage system. Some small areas of localized ponding still exist, but plans have been developed to remedy these situations.

In the north and west portions of Chandler development is nearly complete. These areas were developed under a City policy of using on-site retention of the 100-year, 2-hour storm. This policy has been generally successful.

Some land has been developed in South Chandler, however, most is undeveloped. In this area of the City retention basins sized for the 100-year, 2-hour storm are being provided. Disposal is by percolation and infiltration.

Future Trends

Continued growth in South Chandler will require the development of additional stormwater facilities. The City plans additional stormwater collection piping in Central Chandler, retention basins, drywells and pump stations to satisfy the needs of increased growth. The City will also use to the maximum the Arizona Department of Transportation (ADOT) drainage facilities to facilitate the disposal of Chandler stormwater.

Planning Issues

Several key planning issues affect this element.

- On the stormwater side, the City must continue its dialog with ADOT concerning the routing of Chandler stormwater to the Price and Santan Freeway drainage facilities.
- The City should initiate discussions with other local entities to address on a regional basis the predicted flooding due to the 100-year, 24-hour storm.
- The City must apply for a stormwater Phase II NPDES permit for its municipal separate stormwater system. The stormwater from the City's system is ultimately discharged to the Salt and Gila Rivers, both classified as "waters of the United States." The City's industrial type facilities, such as storage yards, will be required to obtain a stormwater Phase II permit or a "no exposure" exemption if stormwater does not contact materials on these sites.

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Goals, Objectives and Policies

GOAL: PROVIDE AN EFFECTIVE STORMWATER SYSTEM WITHIN THE CITY.

OBJECTIVE: Maximize the protection afforded to the residents and businesses of the City against damage or inconvenience due to flooding, in a cost efficient manner.

Policy: Maintain and modify, when deemed necessary, the City's Engineering Standards and Details for rights-of-way, easements, local utilities, and drainage.

Policy: Work with the public, developers, and industry to raise their awareness of the need for an effective drainage system.

Policy: Continue to enforce on-site retention basin policy for new development.

OBJECTIVE: Plan for predicted flooding from areas outside of Chandler's boundaries.

Policy: Participate in meetings with the Flood Control District of Maricopa County (FCDMC), Mesa and Gilbert to identify possible solutions.

Policy: Continue to provide input and work with the FCDMC, on the Higley Area Stormwater Drainage Master Plan.